

**PATENT APPLICATION**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of

Docket No: Q84102

Shunji HAYASHI, et al.

Appln. No.: 10/510,497

Group Art Unit: 1781

Confirmation No.: 1554

Examiner: Hamid R. BADR

Filed: October 7, 2004

For: **CHEESE CAPABLE OF DISINFECTING HELICOBACTER PYLORI**

**DECLARATION (2) UNDER 37 C.F.R. § 1.132**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Mitsuro MATSUO, hereby declare and state:

THAT I am a citizen of Japan;

THAT I have received the degree of Master of Agriculture in 1989 from Kyoto University  
in Kyoto, Japan;

THAT I have been employed by Meiji Dairies Corporation since April in 1989, where I  
hold a position as Manager in Cheese Section in Cheese and Culinary Science Department, with  
responsibility for studies of production of cheese;

THAT I am the same person who executed Declaration (1) under 37 C.F.R. § 1.132,  
which is concurrently submitted, and am familiar with relevant technology of the above-  
identified application.

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I studied Examples described in Anderson et al. (US 3,852,158; hereinafter R2) to calculate and determine the amount of yeast extract used in the Examples of Anderson et al. The following are calculations made by me.

i) Example 1 of R2

Combination ratio of yeast extract in starter medium is:

$$1\% \text{ (combination ratio of yeast extract in dried materials)} \times 11\% \text{ (ratio of dried materials in medium)} = 0.11\%.$$

Since 1% of the above starter was added to milk to produce cheese, the amount of added yeast extract is 0.0011% per liter of milk.

ii) In Examples 2-14 of R2, cheese was not made.

iii) Examples 15-19 of R2

Combination ratio of yeast extract in starter medium is:

$$1\text{-}2\% \text{ (combination ratio of yeast extract in dried materials)} \times 11\% \text{ (ratio of dried materials in medium)} = 0.11\text{-}0.22\%$$

In these examples, the starter cultures were added in amount of 0.75 parts of starter cultures per 100 parts of milk (0.75%). Therefore, the amount of added yeast extract is 0.000825- 0.00165% per liter of milk.

iv) Ratio of Nitrogen Source in Dried Medium

(1) In R2, as described in its claim 1, the ratio of the nitrogen source in the dried medium is 0.5 to 10%. However, the ratios of the dried medium when it is formulated into a starter medium and the added amount of starter to milk are not described in either claims or in the detailed description of R2.

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In the absence of express descriptions of the ratios of the dried medium and the added amount of start to milk, in order to determine the amount of yeast extract to the milk in R2, I performed the following calculations according to Example 1 of R2 (i.e., as calculated above, the combination ratio of yeast extract in starter medium is 0.11%).

.When the yeast extract was used according to Example 1 of R2:

$$0.5-10\% \text{ (combination ratio of yeast extract in dried materials)} \times 11\% \text{ (ratio of dried materials in medium)} = 0.055 - 1.1 \%$$

When 1% of the above starter is added to milk for cheese, the amount of added yeast extract is 0.00055 – 0.011 % per liter of milk.

(2) In the specification of R2, in particular, in the description of the preferred embodiments section, it was described that the ratio of nitrogen source in dried medium is 0.1 to 30%.

When calculation is carried out in a similar manner as in the above iv), the maximum value of amount of yeast extract added to milk is 0.033% per liter of milk.

v) **Conclusion**

Based on the above calculations, the amount of yeast extract used in the process of R2 is far less than 0.05%, which is the lower limit of the amount of yeast extract recited in claim 6 of the instant application.

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I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: October 5, 2010Mitsuro MATSUO

Mitsuro MATSUO